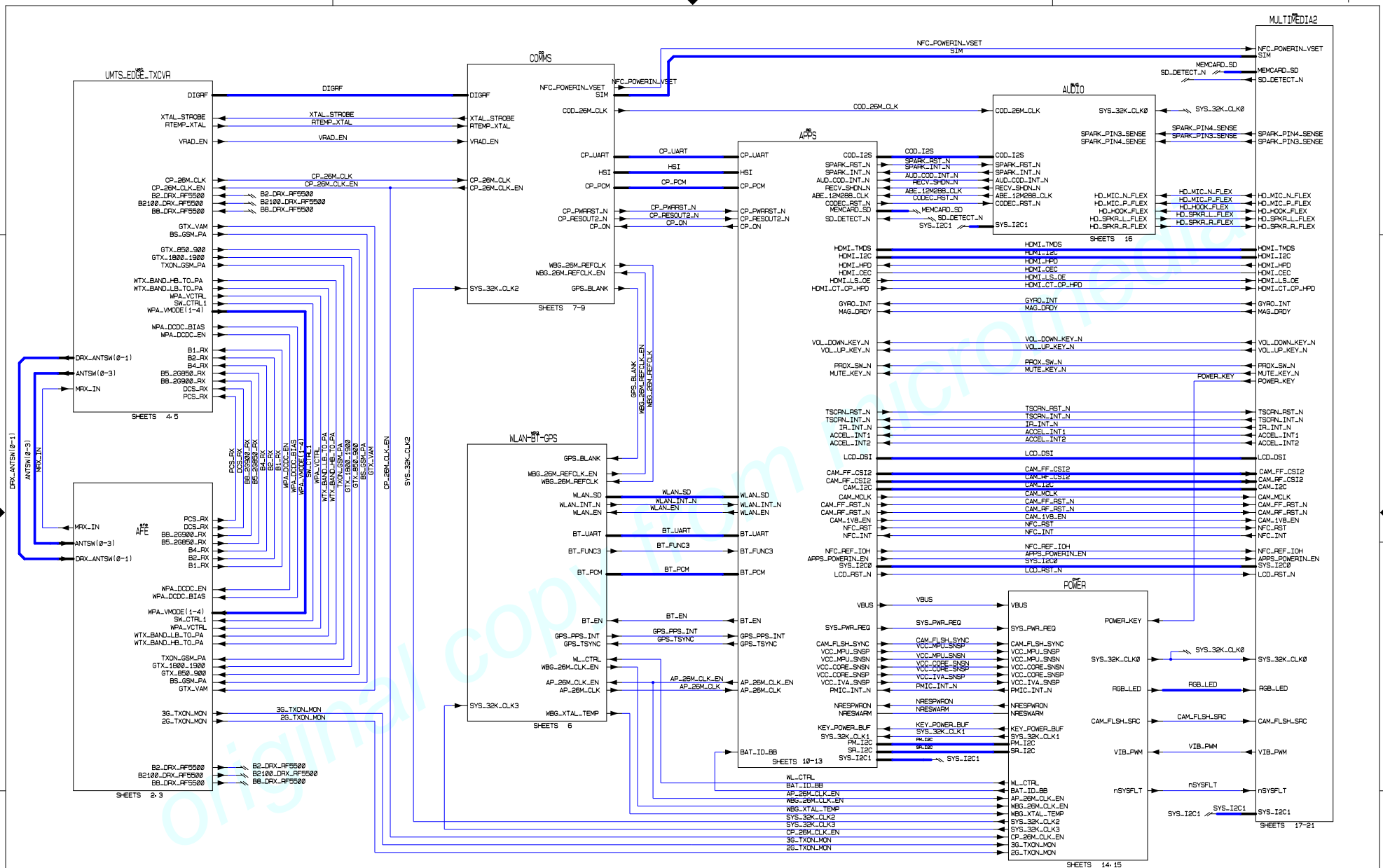
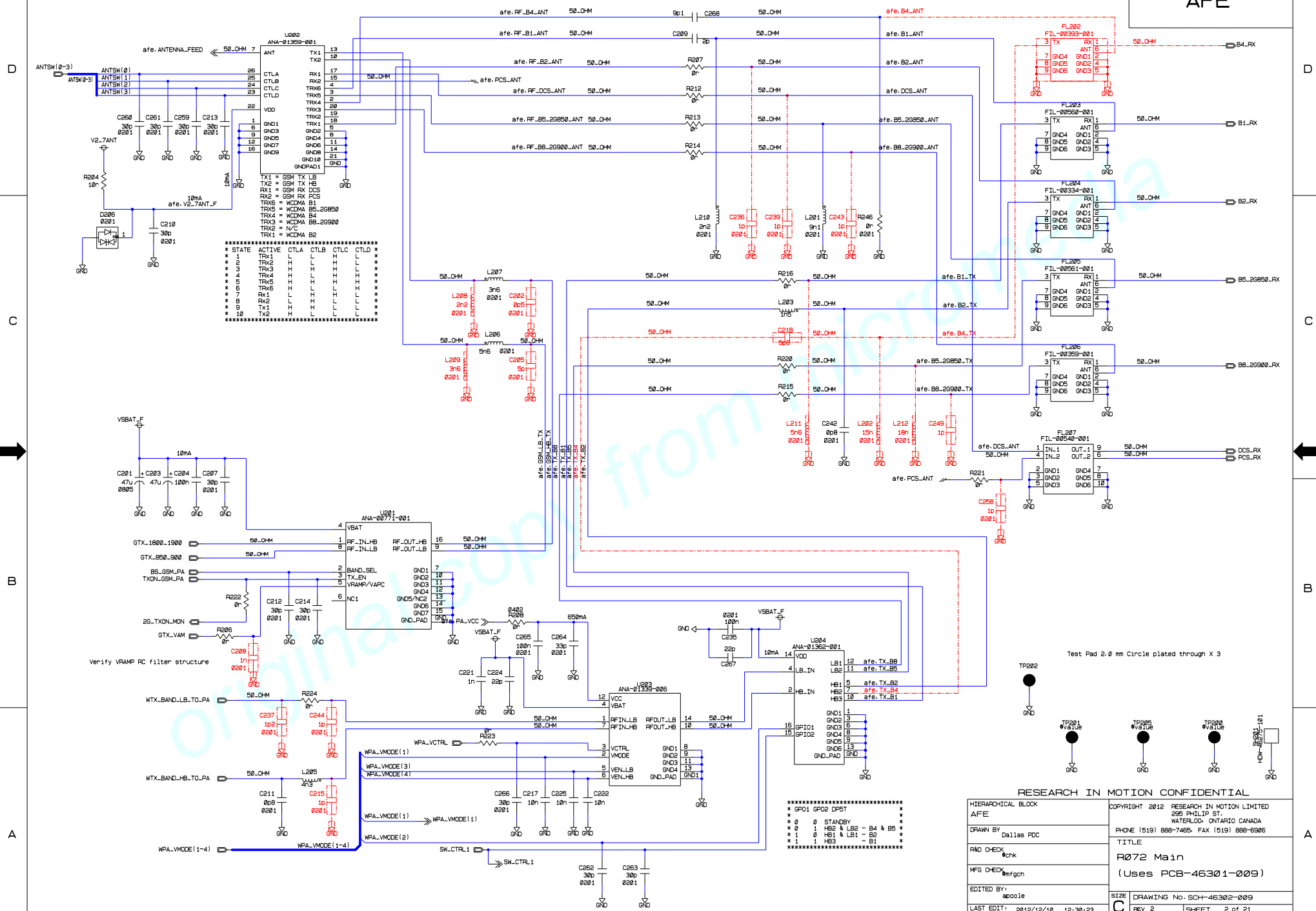


R072 Secure



| RESEARCH IN MOTION CONFIDENTIAL | | |
|---------------------------------|-----------------------------------------------------------------------------------------|-----------------------------------------|
| HIERARCHICAL BLOCK MAIN | COPYRIGHT 2012 RESEARCH IN MOTION LIMITED 295 PHILIP ST. WATERLOO, ONTARIO CANADA | PHONE (519) 888-7465 FAX (519) 888-6986 |
| DRAWN BY Da11as PDC | TITLE R072 Main (Uses PCB-46301-009) | |
| RMD CHECK 0chk | EDITED BY: bradcock | |
| MFG CHECK 0mfgch | LAST EDIT: 2012/12/07 15:10:57 | |
| SIZE C | DRAWING No. SCH-46302-009 | REV 2 SHEET 1 of 21 |

AFE

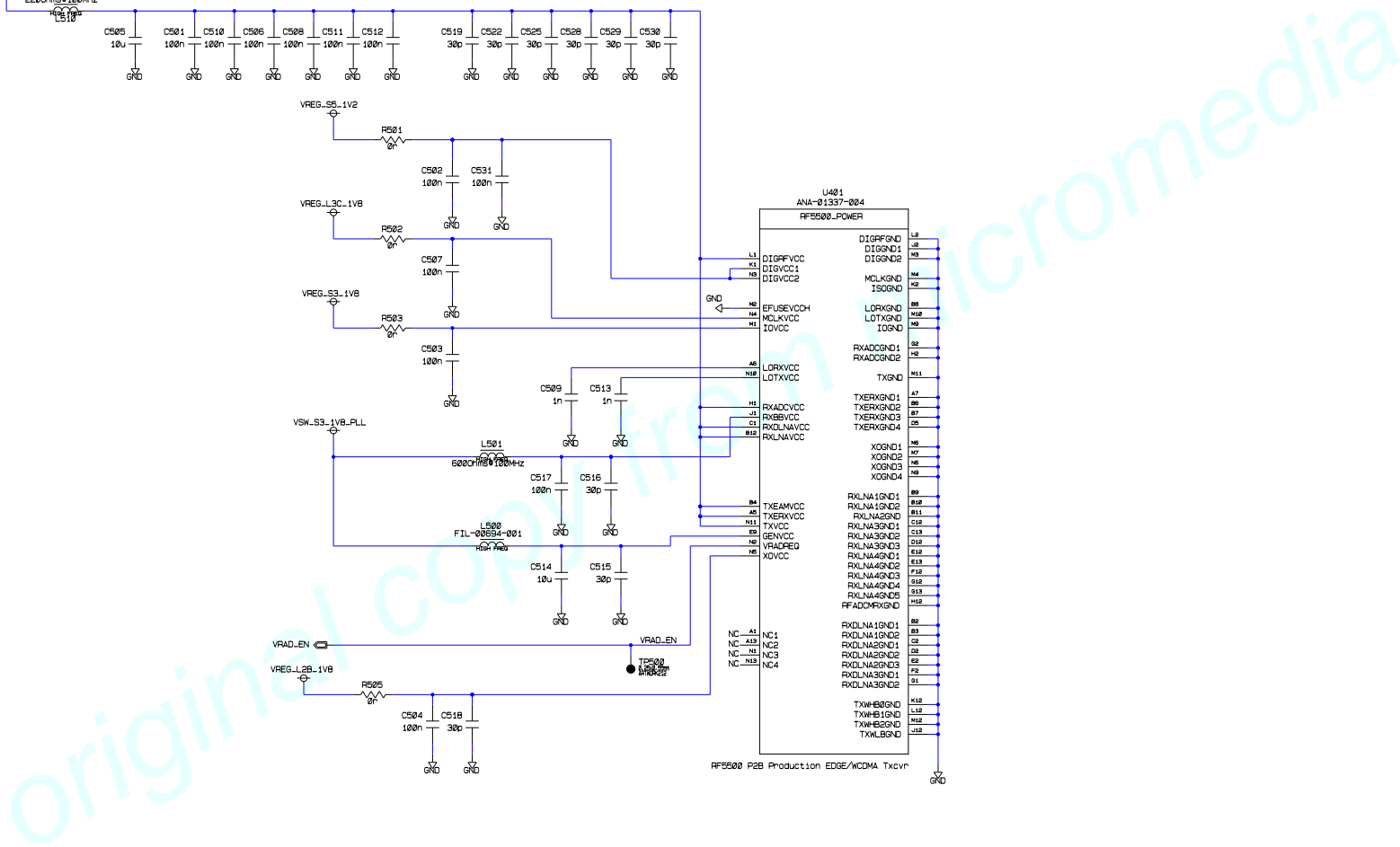




RX DIVERSITY

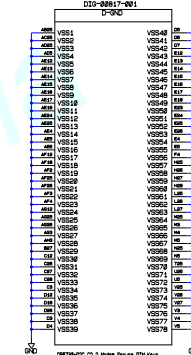


| | | | |
|-----------------------------------------------|--|-------------------------------------------|--|
| HIERARCHICAL BLOCK | | COPYRIGHT 2012 RESEARCH IN MOTION LIMITED | |
| AFE | | 520 PHILIP ST. | |
| DRAWN BY Dallas PDC | | WATERLOO, ONTARIO CANADA | |
| R&D CHECK <input checked="" type="checkbox"/> | | PHONE (519) 888-7465, FAX (519) 888-6906 | |
| MFG CHECK <input type="checkbox"/> | | TITLE | |
| EDITED BY: m001e | | R072 Main | |
| LAST EDIT 2012/12/18 12:30:23 | | (Uses PCB-46301-009) | |
| SIZE | | DRAWING NO. SCH-46302-009 | |
| | | REV 2 SHEET 3 of 21 | |

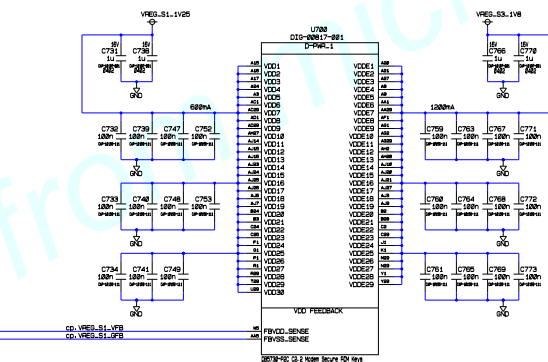
RF5500 TXCVR POWER

COMMS PROC

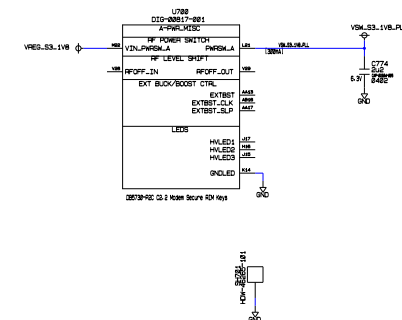
DB5730 Grounds



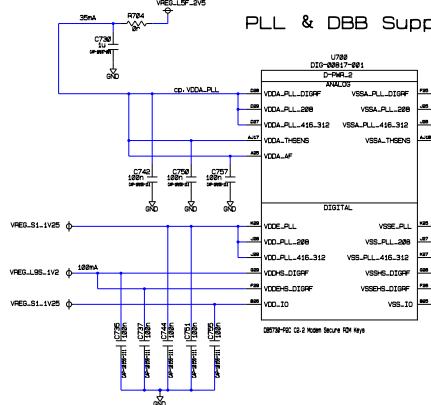
DB5730 Core & Digital



LEDs, Boost & Misc Power



PLL & DBB Supplies



REFDES Assignment = 700-799

Block Range
700-999

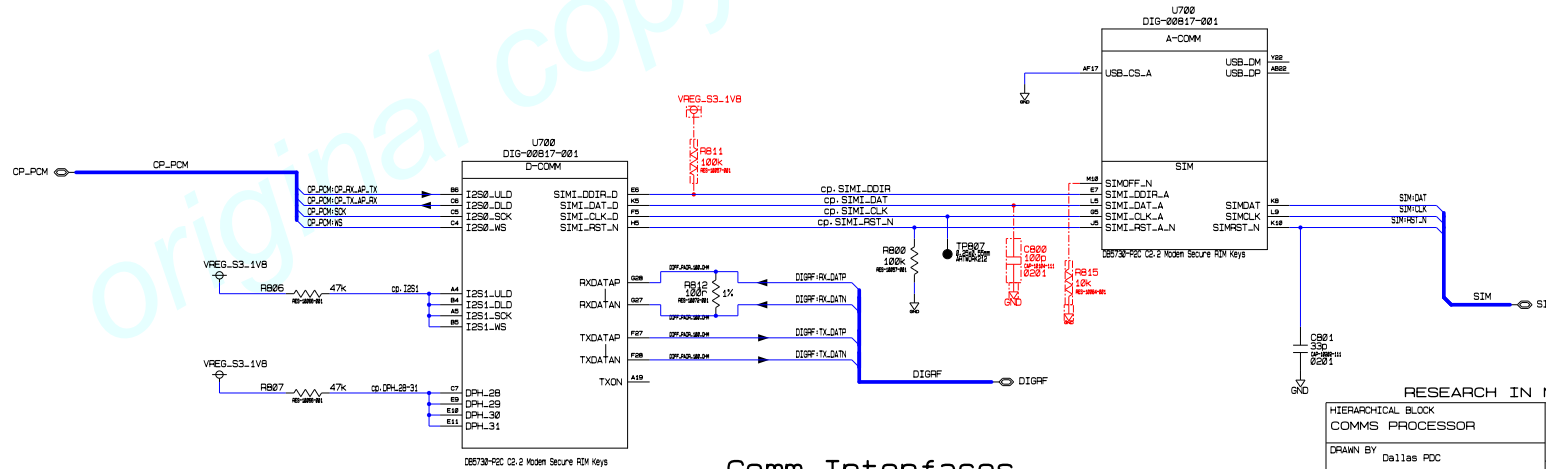
Zuken CR-6333 System Designer

2

RESEARCH IN MOTION CONFIDENTIAL

| | |
|--------------------------------|-------------------------------------------|
| HEPARADICAL BLOCK | COPYRIGHT 2012 RESEARCH IN MOTION LIMITED |
| COMMS PROCESSOR | 250 PHILIP ST. |
| | WATERLOO, ONTARIO CANADA |
| DRAWN BY: Dallas POC | PHONE (519) 889-7425 FAX (519) 889-6305 |
| | TITLE |
| RMO CHECK | R072 Main |
| MF8 CHECK | (Uses PCB-46301-0209) |
| EDITED BY: as0001e | |
| LAST EDIT: 2012/12/10 10:30:26 | |
| | SIZE |
| | DRAWING NO. SCH-46302-009 |
| | REV 2 |
| | SHEET 7 of 21 |

COMMS PROC

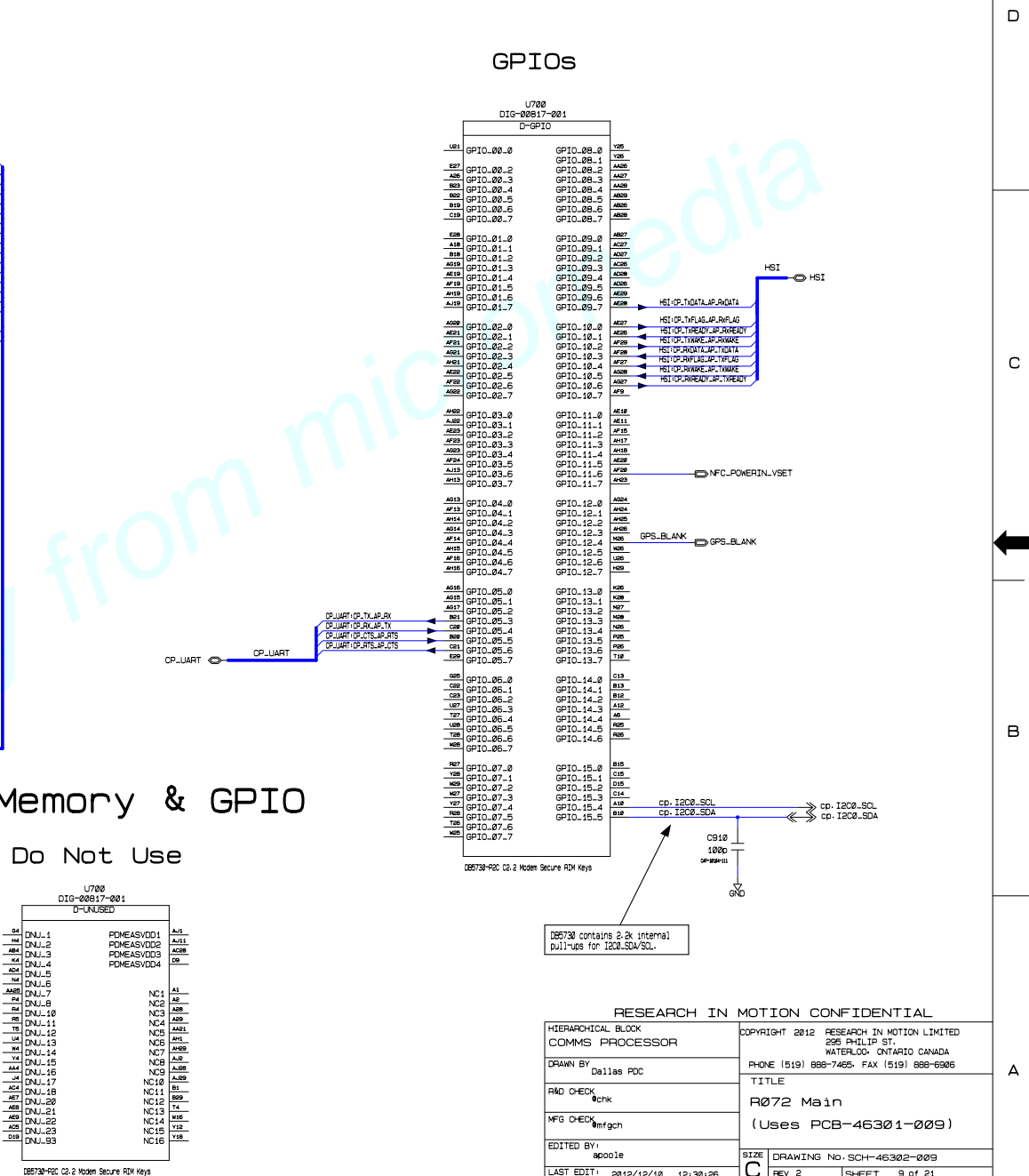
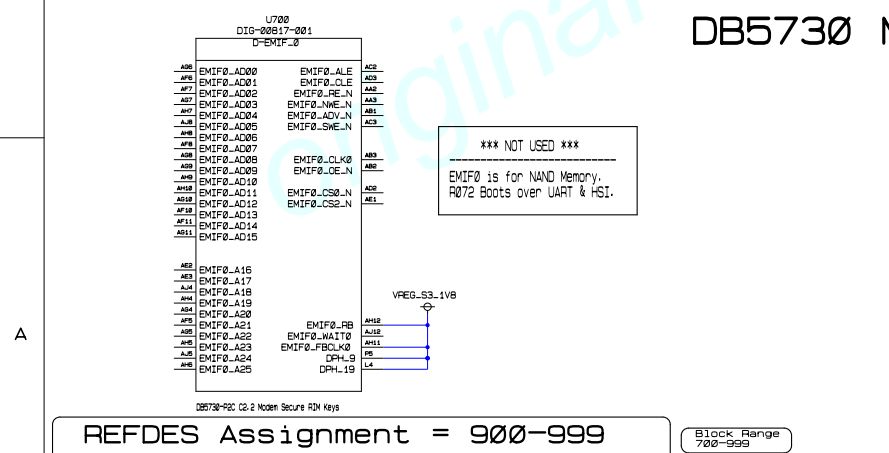
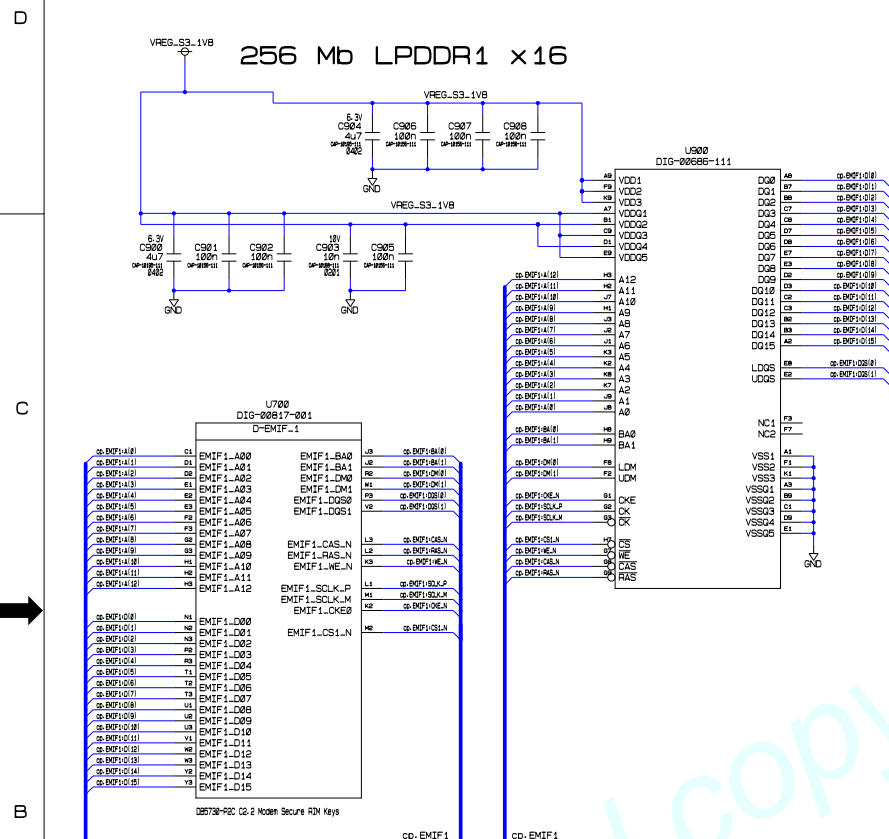


Comm Interfaces

| | |
|-------------------------------------------|---------------------------|
| COPYRIGHT 2012 RESEARCH IN MOTION LIMITED | |
| 295 PHILIP ST. | |
| WATERLOO, ONTARIO CANADA | |
| PHONE (519) 888-7465 FAX (519) 888-6306 | |
| TITLE | |
| R072 Main | |
| (Uses PCB-46301-009) | |
| SIZE | DRAWING No. SCH-46302-009 |
| C | REV 2 |
| | SHEET 8 of 21 |

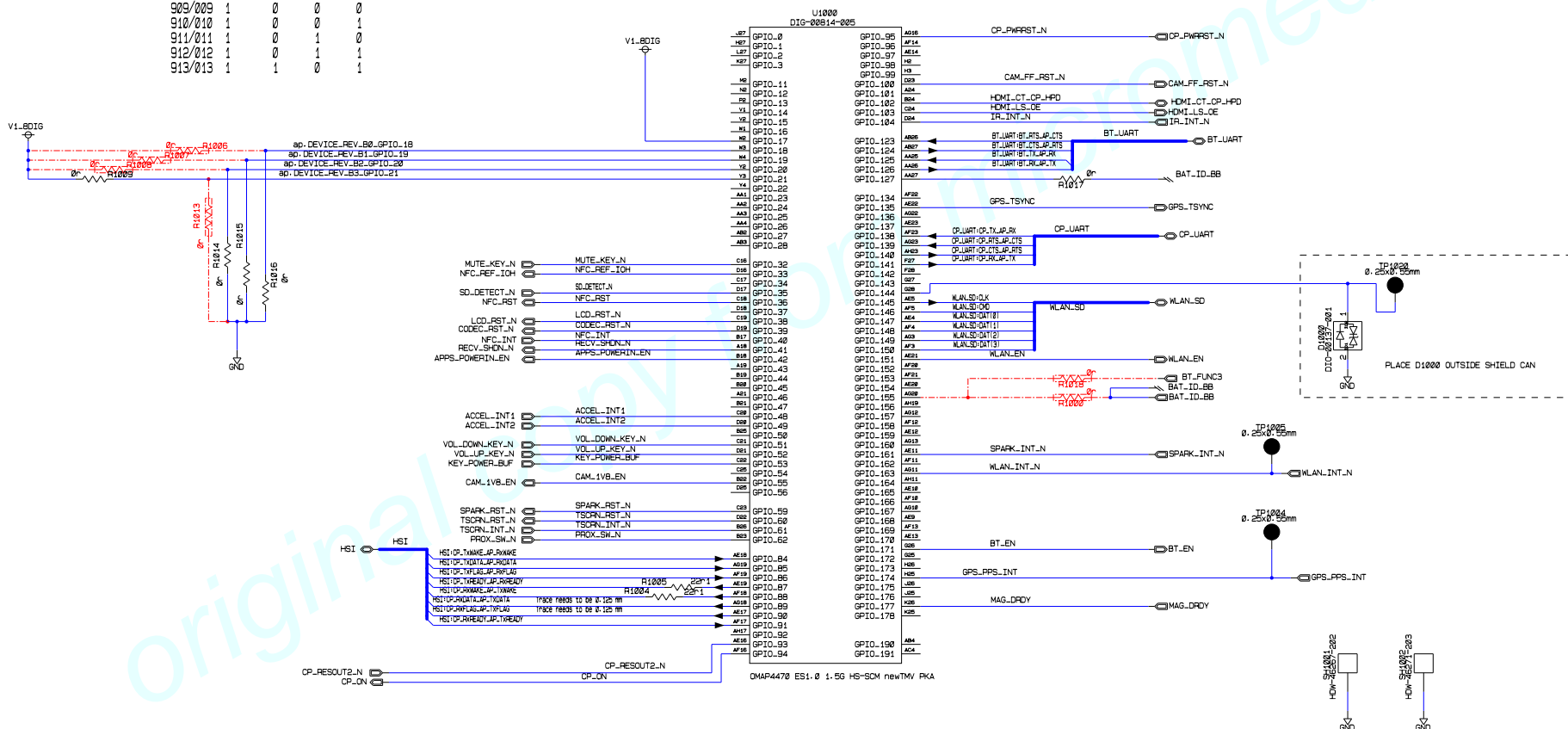
REFDES Assignment = 800-899

Block Range
700-999



GPIOs

| Status | REV | GPI021 | GPI020 | GPI019 | GPI018 |
|------------|---------|--------|--------|--------|--------|
| Non Secure | 901 | 0 | 0 | 0 | 0 |
| Non Secure | 902 | 0 | 0 | 0 | 1 |
| Non Secure | 903 | 0 | 0 | 1 | 0 |
| Non Secure | 904 | 0 | 0 | 1 | 1 |
| Non Secure | 905 | 0 | 1 | 0 | 0 |
| Non Secure | 906 | 0 | 1 | 0 | 1 |
| Non Secure | 907 | 0 | 1 | 1 | 0 |
| Secure | 5 | 1 | 1 | 0 | 0 |
| Secure | 7 | 1 | 1 | 1 | 0 |
| Secure | 8 | 1 | 1 | 1 | 1 |
| | 909/009 | 1 | 0 | 0 | 0 |
| | 910/010 | 1 | 0 | 0 | 1 |
| | 911/011 | 1 | 0 | 1 | 0 |
| | 912/012 | 1 | 0 | 1 | 1 |
| | 913/013 | 1 | 1 | 0 | 1 |



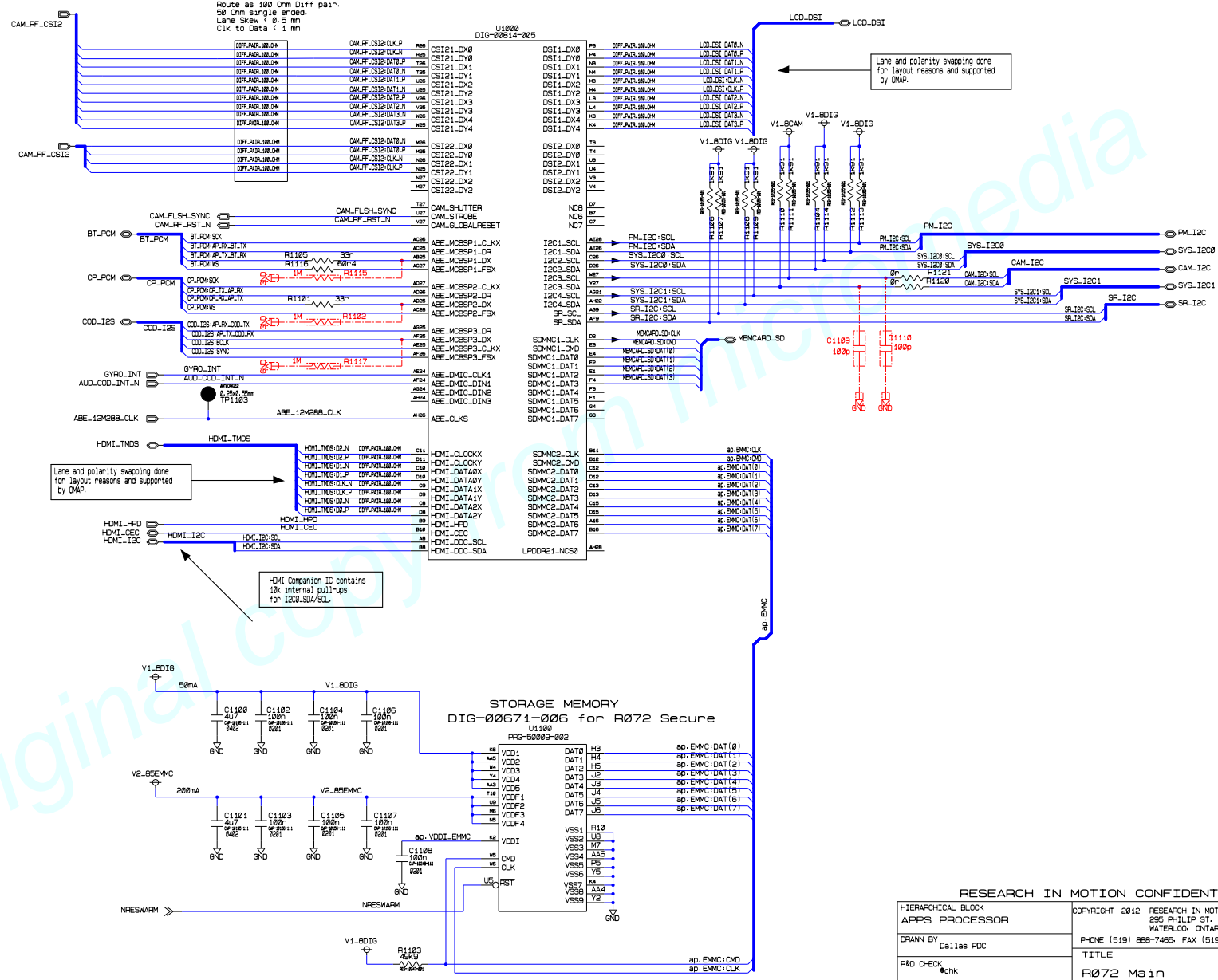
RESEARCH IN MOTION CONFIDENTIAL

| | |
|-----------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| HIERARCHICAL BLOCK APPS PROCESSOR DRAWN BY Dallas PDC RKO CHECK MFG CHECK EDITED BY: acocile LAST EDIT: 2012/12/10 12:30:25 | COPYRIGHT 2012 RESEARCH IN MOTION LIMITED 2800 PHILIP ST WILLOWDALE, ONTARIO CANADA PHONE (519) 888-7455 FAX (519) 888-6306 TITLE R072 Main (Uses PCB-46301-009) |
| | SIZE C DRAWING NO. SCH-46302-009 REV 2 SHEET 10 of 21 |

REFDES Assignment = 1000-1099

Block Range
1000-1399

Communications

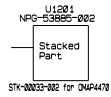


| | | |
|---------------------------------|---------------------|-----------------------------------------------------------------------------------------|
| RESEARCH IN MOTION CONFIDENTIAL | | |
| HIERARCHICAL BLOCK | APPS PROCESSOR | COPYRIGHT 2012 RESEARCH IN MOTION LIMITED 295 PHILIP ST. WATERLOO, ONTARIO CANADA |
| DRAWN BY | Da11as PDC | PHONE (519) 888-7465 FAX (519) 888-6986 |
| RND CHECK | chk | TITLE |
| MFG CHECK | mfgh | R072 Main |
| EDITED BY | ap001e | (Uses PCB-46301-009) |
| LAST EDIT | 2012/12/10 12:30:25 | SIZE |
| | | DRAWING No. SCH-46302-009 |
| | | REV 2 |
| | | SHEET 11 of 21 |

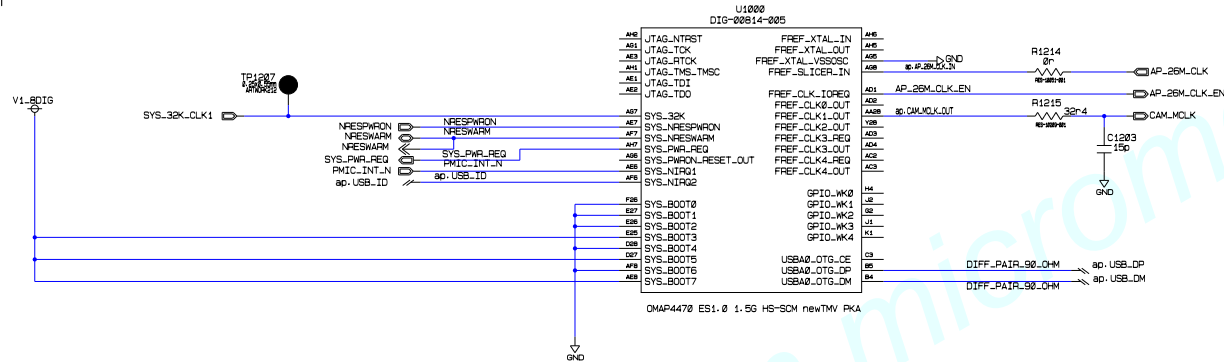
REFDES Assignment = 1100-1199

Block Range
1000-1399

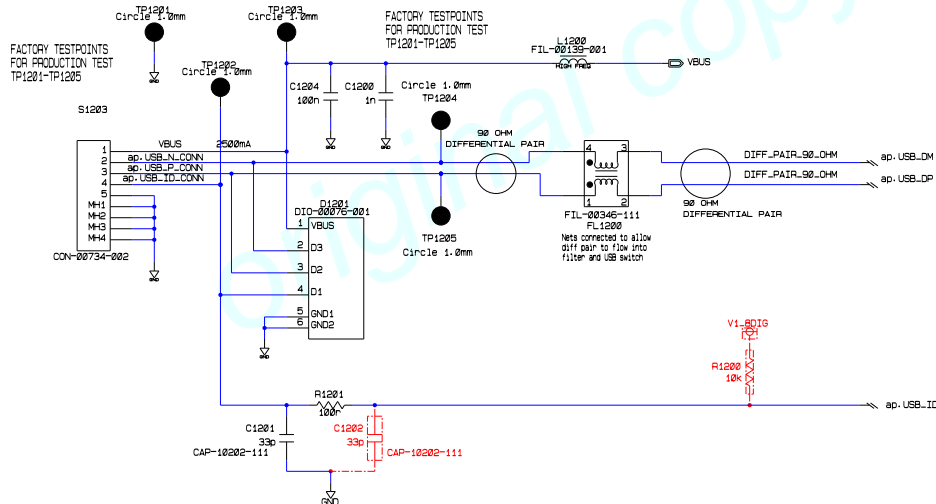
Dual DDR2 PoP for OMAP44XX



OMAP Clock & Control



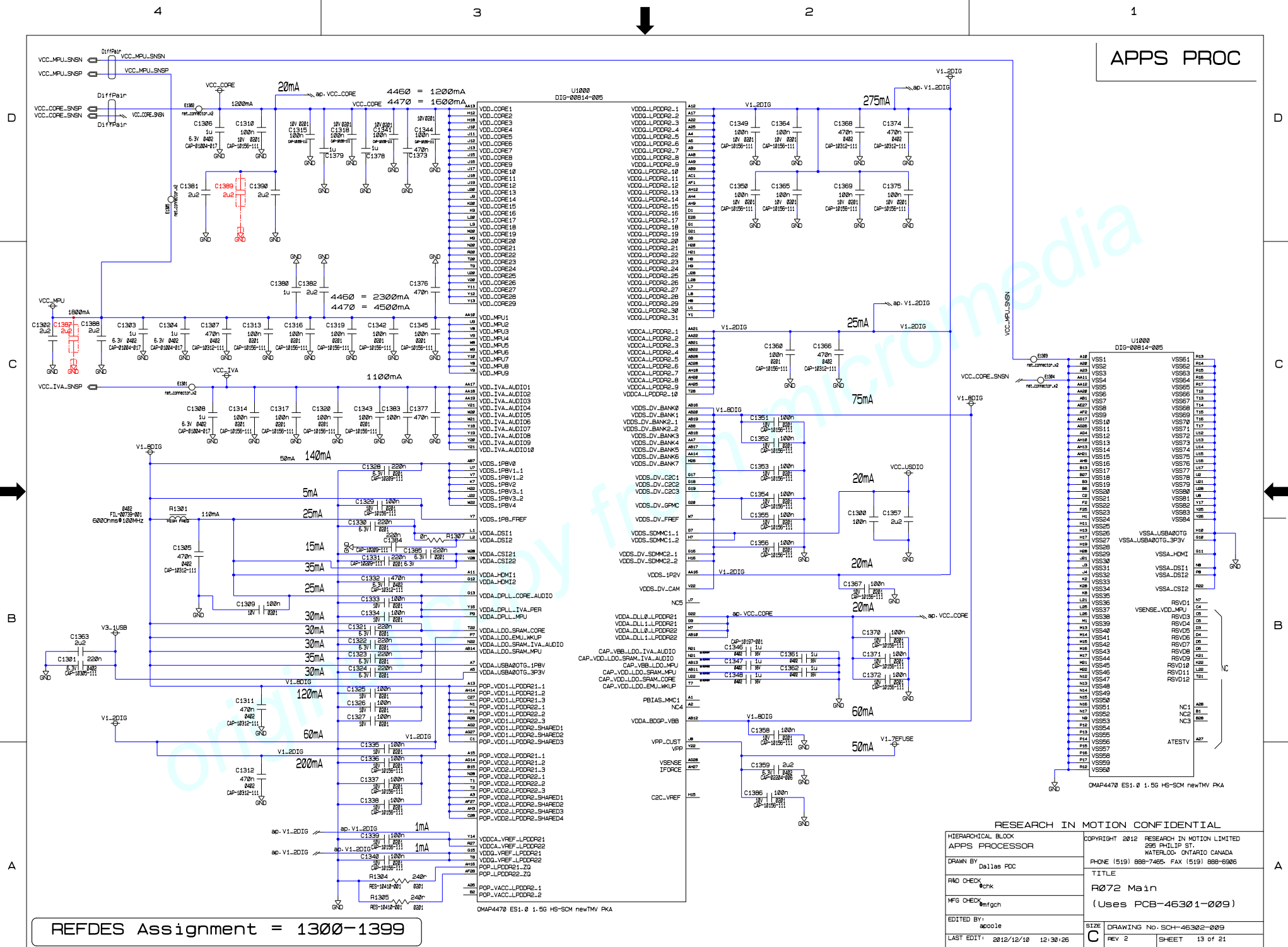
CHARGE/USB CONNECTOR



REFDES Assignment = 1200-1299

RESEARCH IN MOTION CONFIDENTIAL

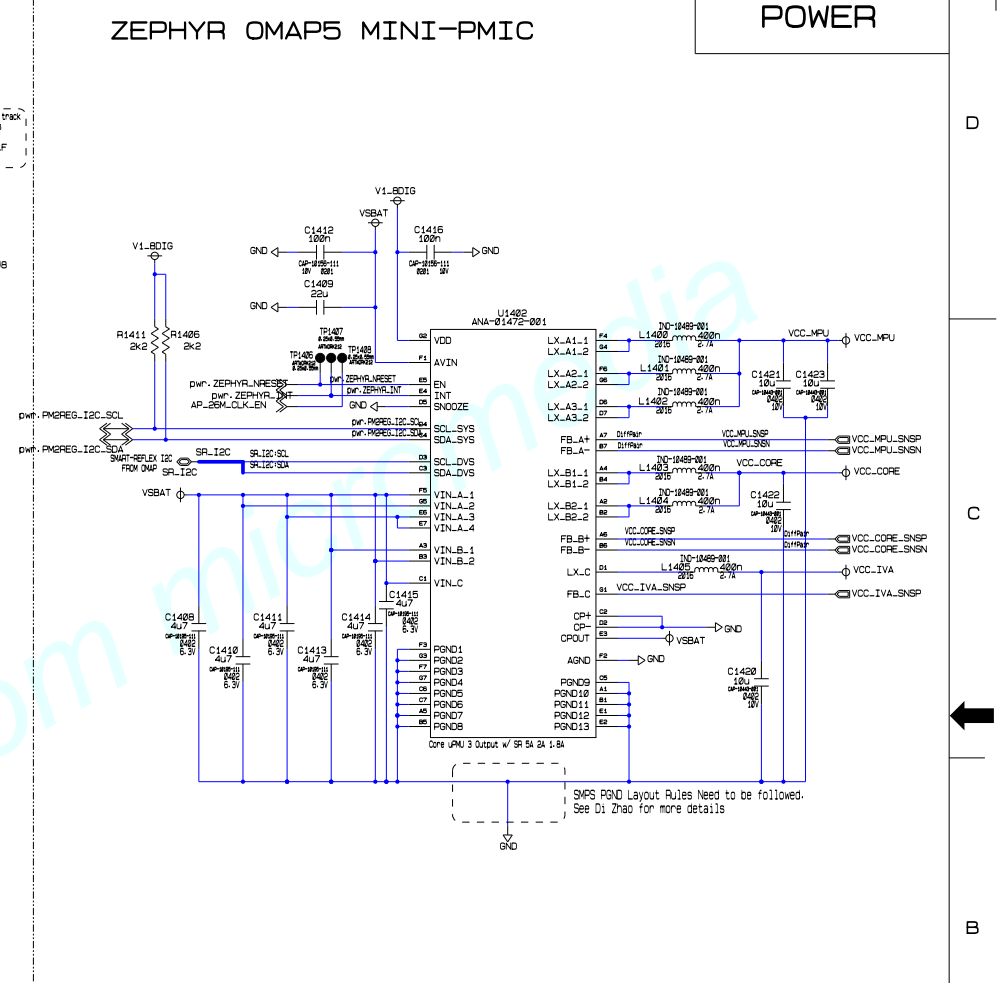
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|--------------------------------------|-----------------------------------------------------------------------------------------|
| HIERARCHICAL BLOCK APPS PROCESSOR | COPYRIGHT 2012 RESEARCH IN MOTION LIMITED 295 PHILIP ST. WATERLOO, ONTARIO CANADA |
| DRAWN BY Dallas PDC | PHONE (519) 888-7465 FAX (519) 888-6986 |
| RAD CHECK chk | TITLE R072 Main (Uses PCB-46301-009) |
| WFS CHECK mfgcn | SIZE C |
| EDITED BY apocle | DRAWING NO. SCH-46302-009 |
| LAST EDIT: 2012/12/10 12:30:05 | REV 2 SHEET 12 of 21 |



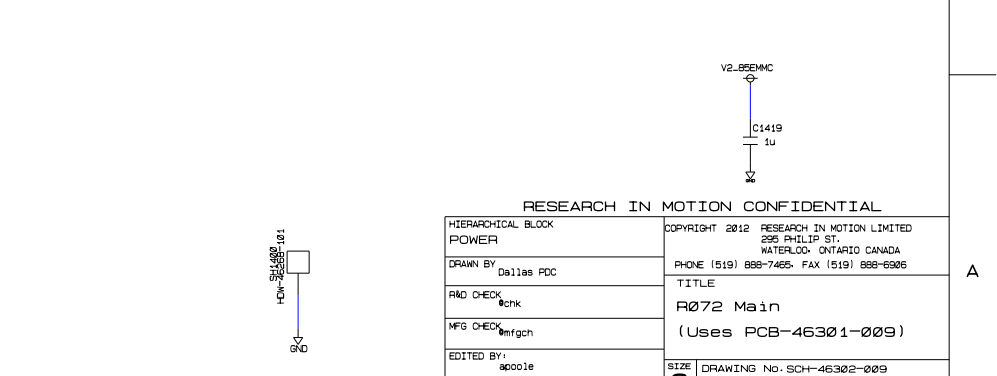
REFDES Assignment = 1300-1399

| RESEARCH IN MOTION CONFIDENTIAL | | |
|---------------------------------|-------------------------------------------|--|
| HIERARCHICAL BLOCK | COPYRIGHT 2012 RESEARCH IN MOTION LIMITED | |
| APPS PROCESSOR | 295 PHILIP ST. | |
| DRAWN BY Dallas PDC | WATERLOO, ONTARIO CANADA | |
| RMD CHECK chk | PHONE (519) 888-7465 FAX (519) 888-6986 | |
| MFG CHECK mfgch | TITLE | |
| EDITED BY: ad001e | R072 Main | |
| LAST EDIT: 2012/12/10 12:30:26 | (Uses PCB-46301-009) | |
| SIZE C | DRAWING No. SCH-46302-009 | |
| REV 2 | SHEET 13 of 21 | |

POWER

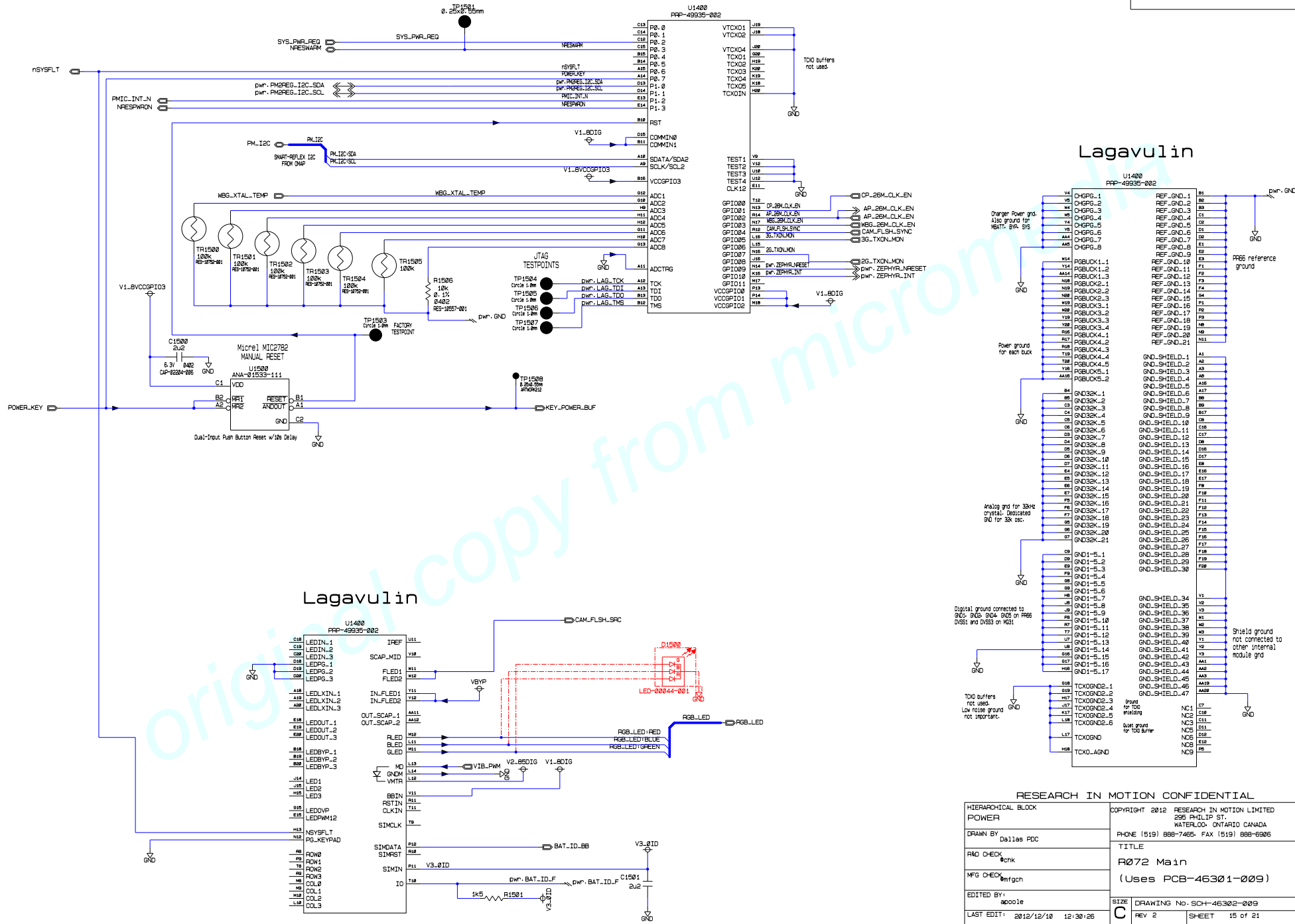


RESEARCH IN MOTION CONFIDENTIAL

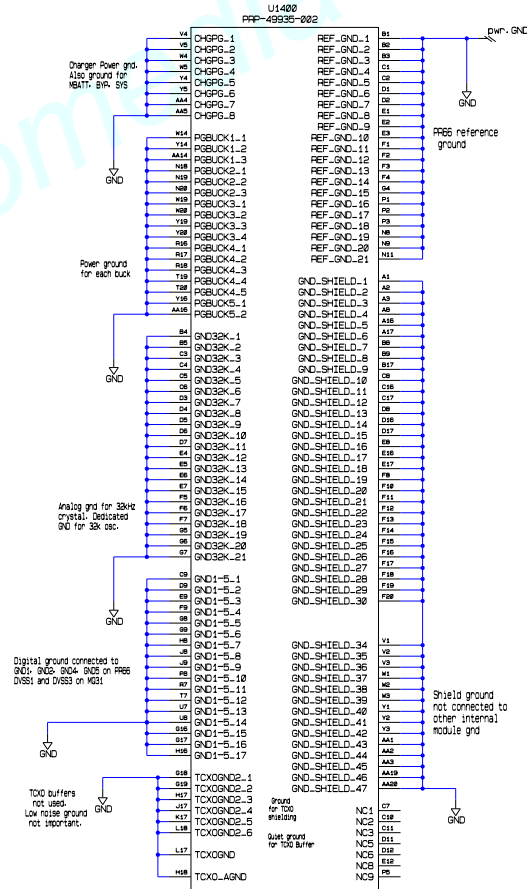


Lagavulin

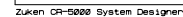
POWER



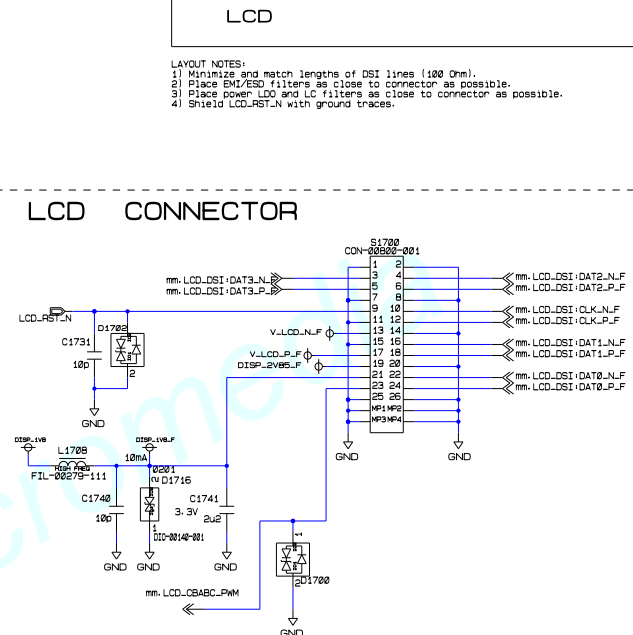
Lagavulin



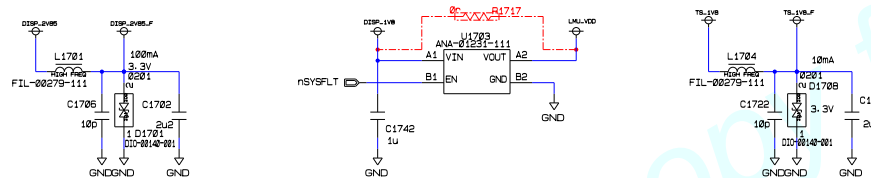
| RESEARCH IN MOTION CONFIDENTIAL | | |
|----------------------------------|-----------------------------------------------------------------------------------------|----------------|
| HIERARCHICAL BLOCK POWER | COPYRIGHT 2012 RESEARCH IN MOTION LIMITED 295 PHILIP ST. WATERLOO, ONTARIO CANADA | |
| DRAWN BY Da11as PDC | PHONE (519) 888-7465 FAX (519) 888-6986 | |
| RWD CHECK chk | TITLE R072 Main (Uses PCB-46301-009) | |
| MFG CHECK mfgch | SIZE DRAWING No. SCH-46302-009 | |
| EDITED BY a0001e | REV 2 | SHEET 15 of 21 |
| LAST EDIT 2012/12/10 12:30:25 | | |



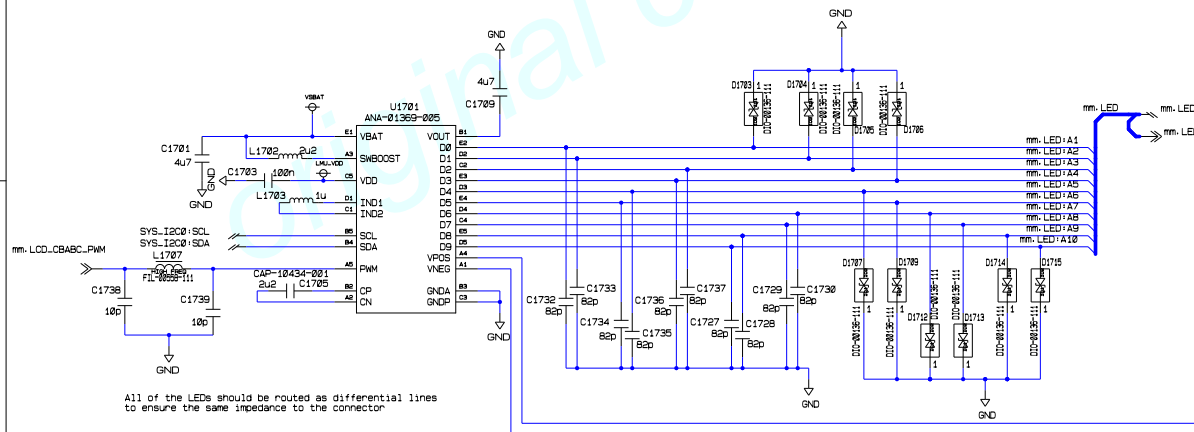
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| HIERARCHICAL BLOCK AUDIO | | COPYRIGHT 2012 RESEARCH IN MOTION LIMITED 595 PHILIP ST. WATERLOO, ONTARIO CANADA | |
| DRAWN BY Dallas POC | | PHONE (519) 888-7465 FAX (519) 888-6906 | |
| AMD CHECK <input checked="" type="checkbox"/> ok | | TITLE | |
| MFG CHECK <input checked="" type="checkbox"/> mfgch | | R075 Main (Uses PCB-46301-009) | |
| EDITED BY: moolie | | DRAWING NO. S4S-4632-009 | |
| LAST EDIT: 2012/12/18 12:30:24 | | SIZE C | REV 2 SHEET 16 of 21 |



DISPLAY POWER LOAD SWITCHES

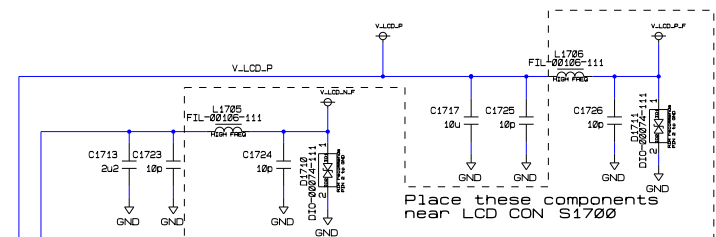
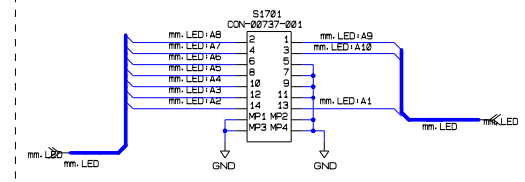


KRONENBURG BACKLIGHT LMU



All of the LEDs should be routed as differential lines to ensure the same impedance to the connector

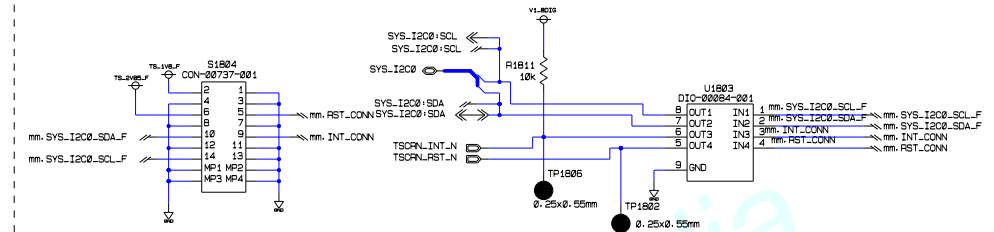
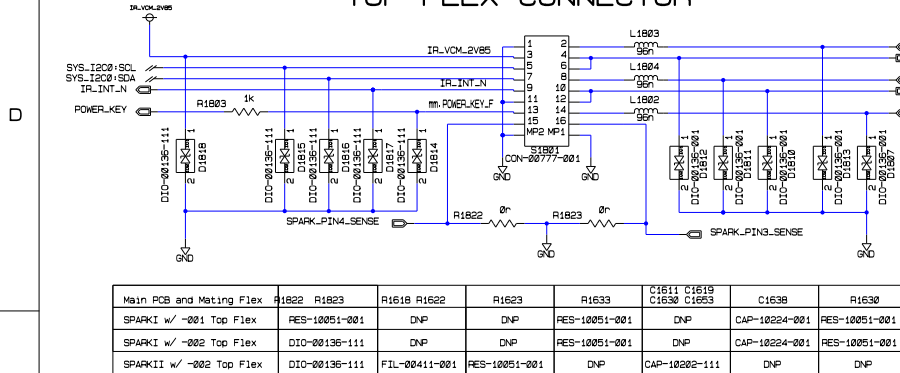
LCD BACKLIGHT CONNECTOR



Place these components
near LCD CON S1700

| | | | |
|------------------------------------|--|-----------------------------------------------------------------------------------------|----------|
| HIERARCHICAL BLOCK IO_INTERFACE | | COPYRIGHT 2012 RESEARCH IN MOTION LIMITED 228 PHILIP ST. WATERLOO, ONTARIO CANADA | |
| DRAWN BY Dallas PDC | | PHONE (519) 888-7465, FAX (519) 888-6906 | |
| R&D CHECK @cnk | | TITLE R072 Main | |
| MFG CHECK mfgcn | | (Uses PCB-46301-009) | |
| EDITED BY: @pcollie | | SIZE | |
| LAST EDIT: 2012/12/18 12:30:24 | | DRAWING NO. SCH-46302-009 | |
| | | C | REV 2 |
| | | SHEET | 17 of 21 |

TOUCH PANEL CONNECTOR

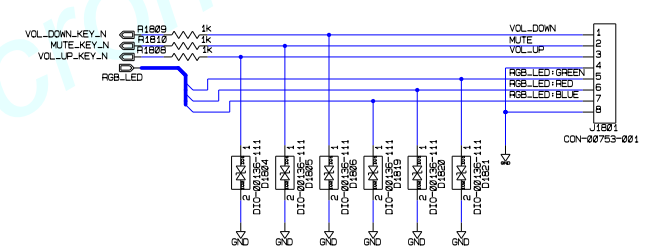
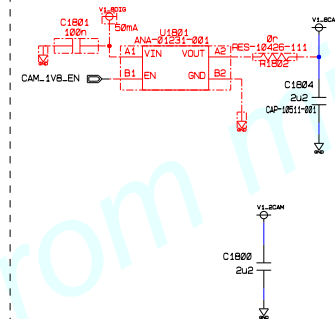
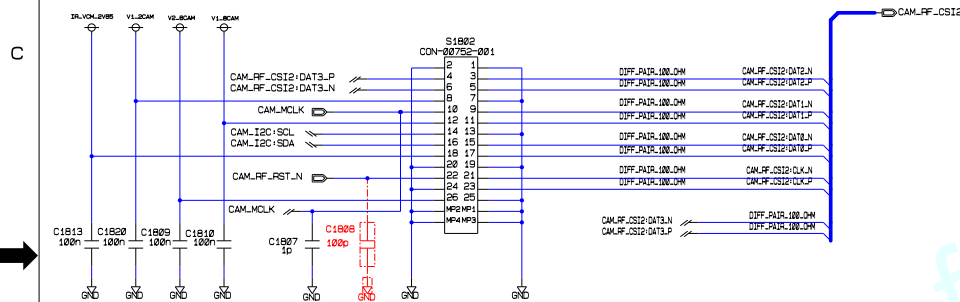


| Main PCB and Mating Flex | R1822 | R1823 | R1618 | R1622 | R1623 | R1633 | C1611 | C1619 | C1630 | C1653 | C1638 | R1630 |
|--------------------------|---------------|---------------|---------------|-------|-------|---------------|-------|-------|---------------|-------|---------------|-------|
| SPARKI w/ -001 Top Flex | RES-10051-001 | | DNP | | DNP | RES-10051-001 | DNP | | CAP-10224-001 | | RES-10051-001 | |
| SPARKI w/ -002 Top Flex | DIO-00136-111 | | DNP | | DNP | RES-10051-001 | DNP | | CAP-10224-001 | | RES-10051-001 | |
| SPARKII w/ -002 Top Flex | DIO-00136-111 | FIL-00411-001 | RES-10051-001 | | DNP | CAP-10222-111 | DNP | | DNP | | DNP | DNP |

REAR FACING CAMERA FLEX

CAM LOAD SWITCHS

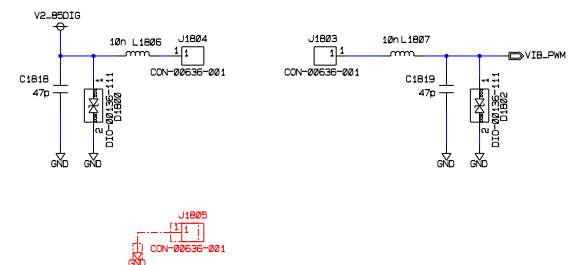
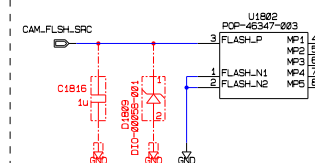
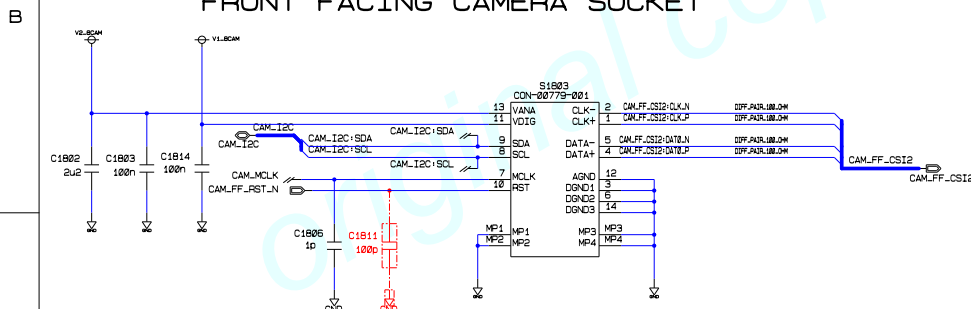
SIDE KEY FLEX CONNECTOR



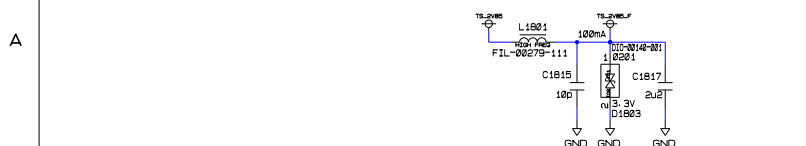
FRONT FACING CAMERA SOCKET

CAMERA FLASH
DAUGHTER BOARD
CONNECTIONS

VIBRATOR



TOUCH PANEL POWER LOAD SWITCH



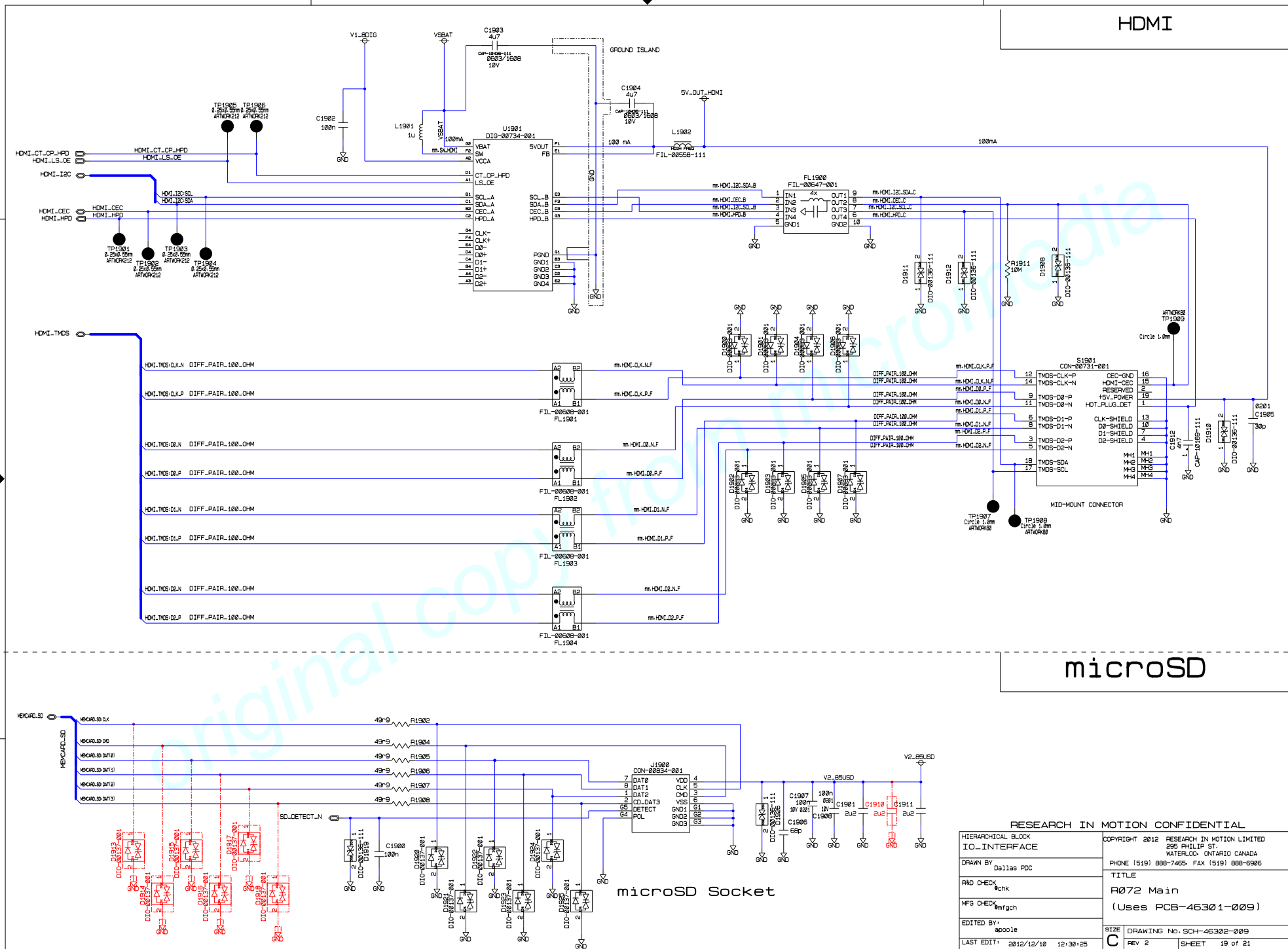
| | |
|------------------------------------|---------------------------------------------------------------------------------------|
| RESEARCH IN MOTION CONFIDENTIAL | |
| HIERARCHICAL BLOCK IO_INTERFACE | COPYRIGHT 2012 RESEARCH IN MOTION LIMITED 250 HILL ST. WATERLOO, ONTARIO CANADA |
| DRAWN BY Dallas PDC | PHONE (519) 888-7465. FAX (519) 888-6906 |
| R&D CHECK @chk | TITLE R072 Main |
| MFG CHECK mfrgcn | (Uses PCB 46301-009) |
| EDITED BY: mpoole | SIZE DRAWING NO. SCH-46302-009 |
| LAST EDIT: 2012/12/07 15:09:39 | REV 2 SHEET 18 of 21 |

D

C

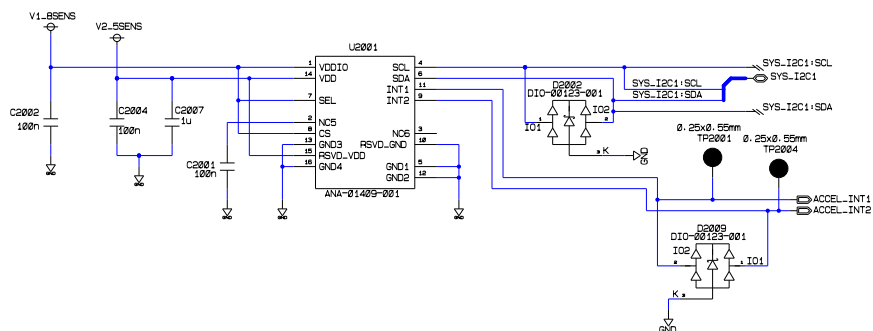
B

A



SENSORS

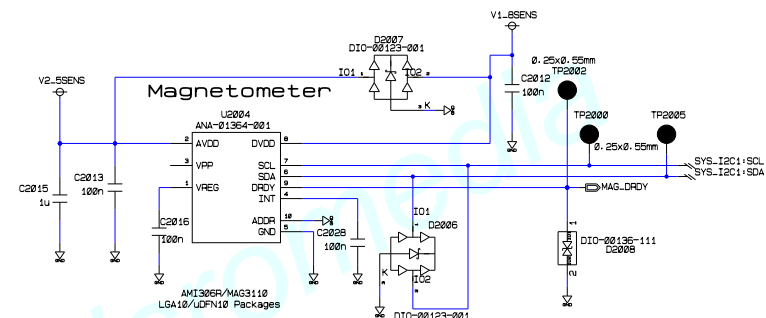
Tri-Axis Accelerometer



Accelerometer Notes

ANA-01157-001 MMA8451Q I2C ADDRESS 0x10 (7-BIT)
 ANA-01489-001 LIS3DSHTR I2C ADDRESS 0x10 (7-BIT)
 SEE SENSOR DFM RULES

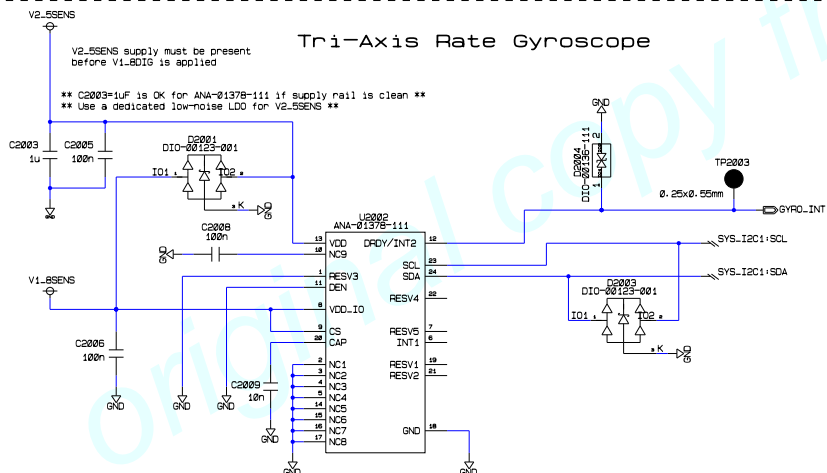
Tri-Axis Discrete Magnetometer



Magnetometer

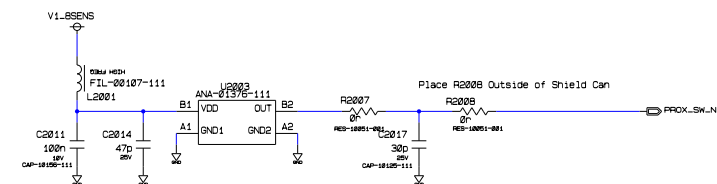
ANA-01364-001 AMI306R I2C ADDRESS 0x10 (8-BIT)
 ANA-01312-001 MAG3110 I2C ADDRESS 0x10 (8-BIT)
 ** See Sensor DFM - DFM-NEMS-DR-01 for Layout Guidelines **
 ** Common Magnetometer RIM PIN TBC **

Tri-Axis Rate Gyroscope



** 5ms resonator start-up time increase for ITO-3050 with C2009=10nF **
 ** Pins 2-3-4-5-14-15-16-17 can be tied to GND and used for achieving routing symmetry and SMT self-alignment **
 ** See Sensor DFM Rules **

HOLSTER DETECT



RESEARCH IN MOTION CONFIDENTIAL

| | |
|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| HIERARCHICAL BLOCK IO_INTERFACE | COPYRIGHT 2012 RESEARCH IN MOTION LIMITED 295 PHILIP ST. WATERLOO, ONTARIO CANADA PHONE (519) 888-7485 FAX (519) 888-6986 |
| DRAWN BY Dallan PDC | TITLE R072 Main (Uses PCB-46301-009) |
| RND CHECK chk | SIZE DRAWING No. SCH-46302-009 |
| MFG CHECK mfgch | REV 2 |
| EDITED BY: ad001e | SHEET 20 of 21 |
| LAST EDIT: 2012/12/10 12:30:25 | |

D

C

B

A

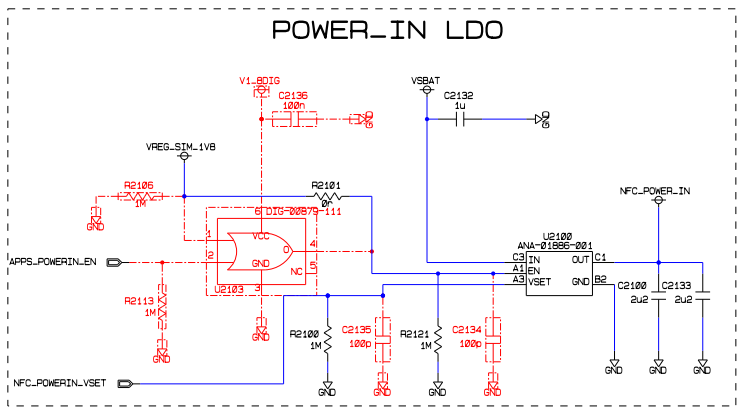
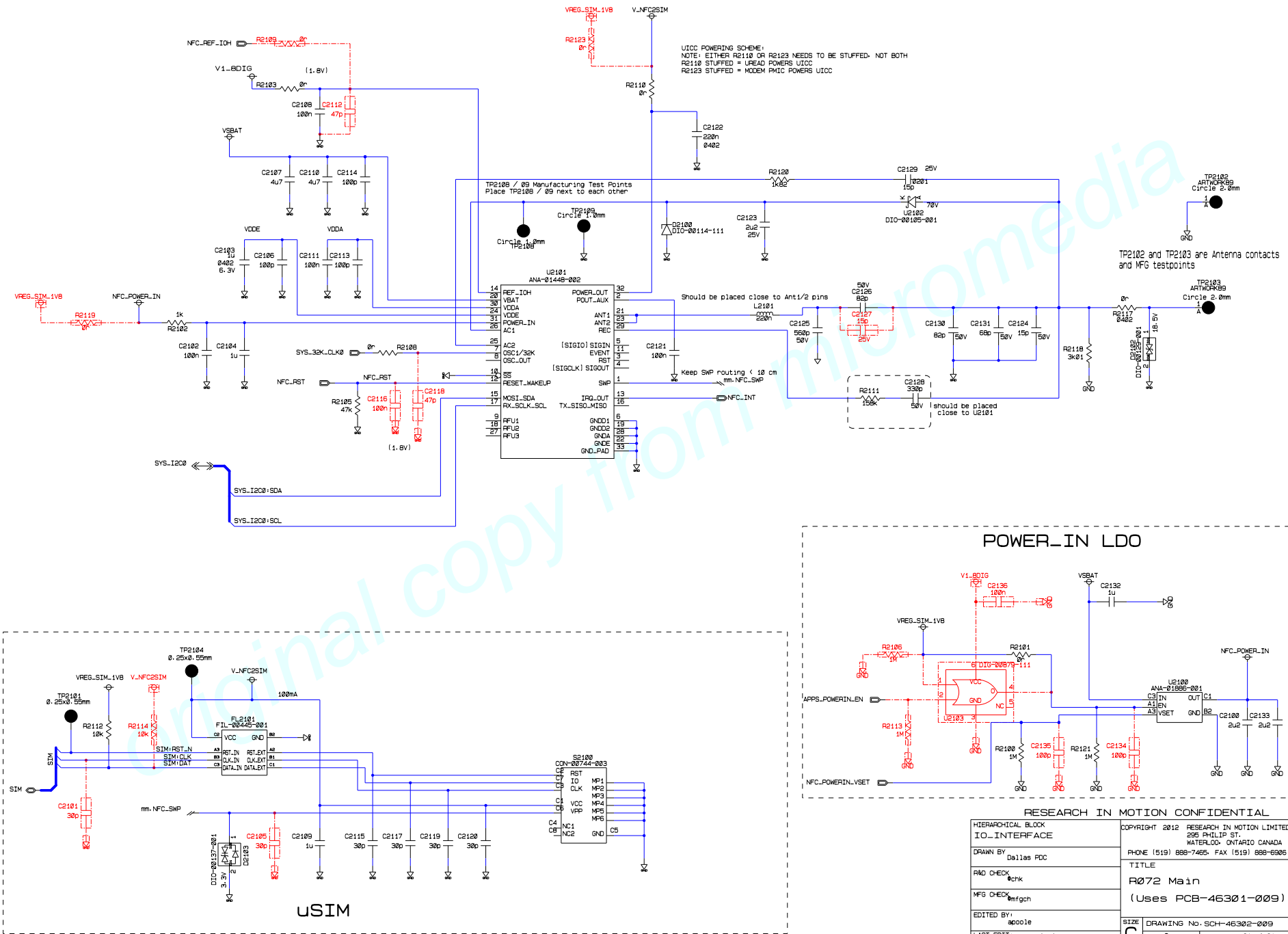
D

C

B

A

NFC & SIM



| RESEARCH IN MOTION CONFIDENTIAL | | |
|---------------------------------|--|-------------------------------------------|
| HIERARCHICAL BLOCK | | COPYRIGHT 2012 RESEARCH IN MOTION LIMITED |
| IO-INTERFACE | | 295 PHILIP ST. |
| DRAWN BY Da11ae PDC | | WATERLOO, ONTARIO CANADA |
| RND CHECK chk | | PHONE (519) 888-7465 FAX (519) 888-6986 |
| MFG CHECK mfgch | | TITLE |
| EDITED BY: ap001e | | R072 Main |
| LAST EDIT: 2012/12/10 12:30:25 | | (Uses PCB-46301-009) |
| SIZE | | DRAWING No. SCH-46302-009 |
| REV 2 | | SHEET 21 of 21 |